

FOR UN

■ **Drought Emergency
in Southern Africa**

May/June 1992

NEWS
NEWS



best copy available

UNITED NATIONS/NATIONS UNIES
DEPARTMENT OF HUMANITARIAN AFFAIRS
DEPARTEMENT DES AFFAIRES HUMANITAIRES
PALAIS DES NATIONS CH 1211 GENEVE 10 - SWITZERLAND

Contents

	Pages
<i>Editorial</i>	2
<i>Drought Emergency in Southern Africa</i>	4
<i>Policies, Institution Building & Legislation for Land-Use Management in Disaster-Prone Countries</i>	8
<i>UNDRO at Work</i>	12
<i>Disaster Mitigation: The Single-Country Approach Colombia</i>	16
<i>Improving Relief Supply Management: A Pan American Initiative</i>	19
ANNOUNCEMENTS	21
<i>SASAKAWA/DHA-UNDRO Disaster Prevention Award</i>	
<i>DHA-UNDRO Disaster Library Kit</i>	
<i>The OAU/DHA-UNDRO Questionnaire on the Status of Disaster Mitigation in Africa</i>	
	22
PUBLICATIONS - Dossier publié par Action d'Urgence Internationale	23
CONFERENCES	24

UNDRO NEWS (ISSN 0250-9377)

Published every two months by the Department of Humanitarian Affairs/UNDRO.
Not an official document. Opinions expressed do not necessarily reflect those of DHA/UNDRO. All material published in this issue may be reproduced without prior permission, provided it is credited to UNDRO News.

Publié tous les deux mois par le Département des Affaires Humanitaires/UNDRO.
Ce bulletin d'information n'est pas un document officiel. Les opinions qui y sont exprimées ne reflètent pas nécessairement celles de DHA/UNDRO. Reproduction autorisée avec mention de la source.

Information Officer and Responsible Editor: *Maureen Lee*.

UNDRO News Editorial Board: *Habib Boulares, S.W.A. Gunn, Vit Karnik, Franklin McDonald, Yuki Sato.*

Department of Humanitarian Affairs/UNDRO.
Palais des Nations, CH-1211 Geneva 10, Switzerland.
Tel.: (+4122) 7346011 7310211 - Telex 414242 dro ch
Facsimile: (+4122) 7335623
UNIENET e-mail Dialcom 141:UNX008
EARN/BITNET e-mail UNDRORREG@UNICC

Editorial

When the first Earth Summit (the UN Conference on Environment and Development) was being held in Rio de Janeiro on the threat to the future of the whole world, a two-day Conference took place in Geneva, on the threat, through drought, to a specific part of our world: Southern Africa.

During the latter event, jointly hosted by the United Nations and the Southern African Development Co-ordination Conference (SADCC), the sum of nearly US \$600 million was pledged, mainly by Western donor countries, to alleviate the plight of the victims in both the short-and the long-term. This positive response from the international community to a drought of unprecedented magnitude in the southern part of Africa, was a significant milestone in UN and regional co-operation.

In part the Conference was successful because the needs involved were clearly understood and documented, and the action proposed was clearly co-ordinated. In part its success was due to the collaborative efforts of the SADCC countries themselves. Their co-operation over the past decade had already produced an early warning system, and their joint endeavours during the recent drought resulted in the setting up of a regional task force. This joint action by the countries of the SADCC region is a praiseworthy achievement of self-help which not only produced positive results, but which will also lead to the necessary bridge being made between relief and development.

The major accomplishment of the Earth Summit was to focus the world's attention on issues vital to the survival of our planet; by so doing, a greater understanding was reached on what needs to be done in the future. In a more tangible, if

Alors que se tenait à Rio le premier "Sommet de la Terre" (la conférence de l'ONU sur l'environnement et le développement), pour évoquer les menaces auxquelles l'avenir de notre planète est confronté, Genève accueillait durant deux journées une rencontre consacrée à ce redoutable fléau qu'est la sécheresse en Afrique australe.

Au cours de cette conférence, qui s'est tenue sous les auspices de L'ONU et de la Conférence pour la coordination du développement en Afrique australe (SADCC), un montant d'environ US \$600 millions de contributions a été annoncé, en provenance notamment des pays donateurs de l'ouest, afin de venir en aide aux victimes, dans l'immédiat et à long terme. Cette réponse positive de la communauté internationale à une sécheresse dont l'ampleur est sans précédent en Afrique australe, représente un jalon décisif de la coopération régionale et de l'action, en ce domaine, de l'ONU.

L'impact de la Conférence s'explique en partie par une définition claire des besoins et par une coordination efficace de l'action envisagée, et en partie par les efforts de collaboration des pays membres de la SADCC. Leur coopération durant ces dix dernières années a permis la mise en place d'un système d'alerte rapide et la création d'un groupe opérationnel au niveau régional. L'action commune des pays de la SADCC, concrétisée par une gestion interne de leurs problèmes, aura eu entre autres résultats, celui de mettre en évidence la nécessité d'associer les secours d'urgence aux activités liées au développement.

L'une des retombées majeures du "Sommet de la Terre" est d'avoir mis en relief, aux yeux du monde entier, des questions vitales pour la survie de notre planète. Cela nous a permis de comprendre l'ampleur des enjeux et ce que nous devons faire pour sauvegarder l'avenir. La Conférence ONU/SADCC nous a montré, quant à elle, de façon on ne peut plus explicite, malgré son caractère géographiquement limité, ce qui peut être accompli grâce à une coopération mieux maîtrisée et plus approfondie. Dans son discours d'ouverture de la Conférence, le Chef de

geographically restricted manner, the joint UN/ SADCC Conference demonstrated what can be achieved through understanding and co-operation. In his opening statement at the Conference, the President of Botswana, and Chairman of SADCC, Sir Ketumile Masire, declared that it presented "both a challenge and an opportunity for us all. We need to work together in seeking permanent solutions." This view was echoed by the Under-Secretary-General for Humanitarian Affairs, Jan Eliasson (representing the UN Secretary-General), who stated that the drought offered a chance "to say to the victims and to the world that North and South must not be divided, that we are all stronger united".

Events such as the Summit and the Conference, clearly illustrate that neither political, ideological nor economic considerations should prevent us from recognizing that unless we work together, as one people on one planet, the world we inhabit will not survive. Let us also hope that the deeds necessary to allow that survival will be well understood by all of us, and will be acted upon speedily and effectively.

l'Etat du Botswana et Président du SADCC, Sir Ketumile Masire, a déclaré : "C'est un défi et une opportunité pour chacun de nous. Il nous faut oeuvrer ensemble afin de trouver des solutions durables". Ce point de vue s'est trouvé conforté par le Secrétaire général adjoint pour les Affaires Humanitaires, Jan Eliasson (qui représentait le Secrétaire général de l'ONU) : "La sécheresse", a-t-il déclaré, "nous a fourni une nouvelle occasion de dire aux victimes et au monde entier que le "Nord" et le "Sud" ne doivent pas être irréversiblement divisés et que nous avons l'impérieuse obligation d'être plus que jamais solidaires."

Des événements tels que le "Sommet Mondial" et la Conférence sur la sécheresse en Afrique australe illustrent on ne peut plus clairement le fait que, par delà les considérations politiques, idéologiques ou économiques, il nous faut prendre conscience de la nécessité d'agir ensemble en tant que communauté humaine solidaire, appartenant à une seule et même planète dont la survie risque d'être gravement compromise. Espérons que les actions à entreprendre en vue de faire face aux défis auxquels nous sommes confrontés soient vraiment comprises par tous et, surtout, qu'elles soient mises en oeuvre de manière rapide et efficace.



The President of Botswana and Chairman of SADCC, Sir Ketumile Masire (left), and the Under-Secretary-General for Humanitarian Affairs, Jan Eliasson, addressing the Pledging Conference on the drought emergency in Southern Africa, held in Geneva on 1-2 June 1992.

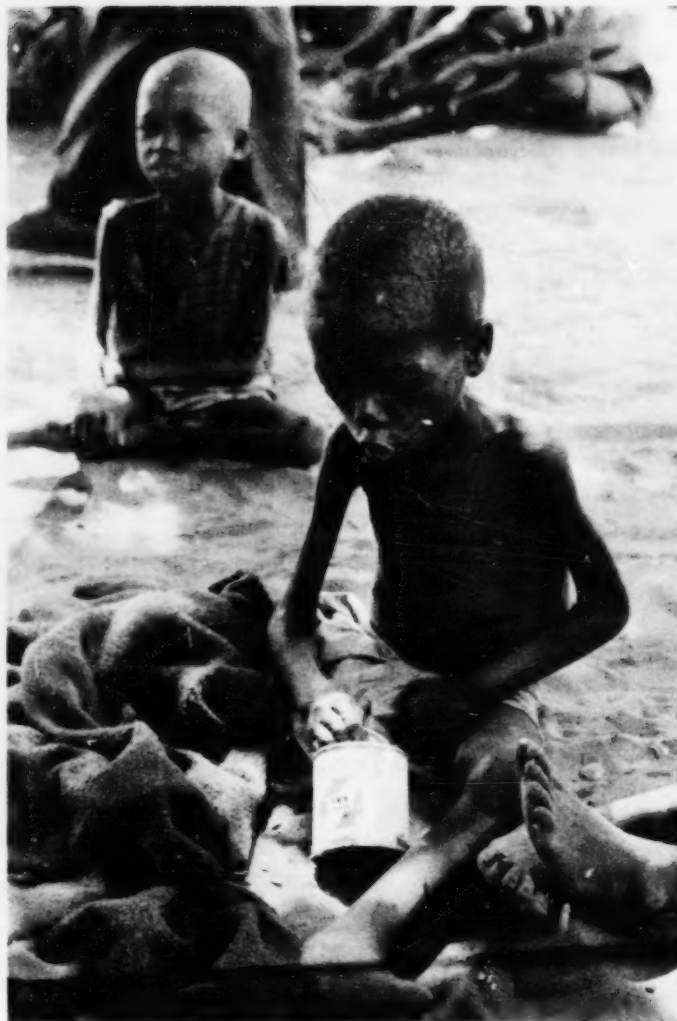
Le Chef de l'Etat du Botswana et Président du SADCC, Sir Ketumile Masire (à gauche), et le Secrétaire général adjoint pour les Affaires Humanitaires, Monsieur Jan Eliasson, lors de la Conférence pour les annonces de contributions en faveur des pays d'Afrique australe touchés par la sécheresse (Genève, 1-2 juin 1992).

Drought Emergency in Southern Africa

The Drought

The year 1992 will be remembered as a period when a region of 2.6 million square miles in Southern Africa was stricken by a devastating drought.

The severity of the drought may have been partly due to a combination of ocean temperature and air pressure anomalies, known as "El Niño" (Spanish for "the Christ Child"). This fluke weather condition brings about bands of low pressure, causing rain-carrying clouds to disappear. Such "warm" episodes occur about twice a decade and can last from 12 to 18 months; in one event in 1982-83, one million Ethiopians starved to death when the ravages of the drought were combined with a drawn-out civil war.



WFP Photo

Drought, on the scale being experienced in Southern Africa today, inflicts starvation on people, especially children . . .

A much weaker warm episode was recorded in 1986-87, followed by a less severe drought across parts of the African continent. Weather experts, who had been issuing warnings for months before the full impact of the situation was recognized by the world community, predict that this year's drought will be closer to the Sahel 1982-83 situation, and crop yields are anticipated to fall below 50% of the normal harvest. In a region which is normally self-sufficient in cereals, at least half of the shortfall in that commodity will have to be imported, at a cost of scarce foreign exchange in a year which will also see a lowering of Africa's export commodities.

The emergency needs of the region come at a time when world food supplies are not increasing, when

demands for assistance are escalating in eastern Europe and the former Soviet Union, and when the international community could very well be experiencing "compassion fatigue".

The Appeal

The impact of the drought directly affects the lives of some 18 million people in ten countries in Southern Africa (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia, Zimbabwe). The lives of a further 130 million are seriously at risk, and the size and scale of the drought also threaten the social fabric and fragile economies of several of these countries.

It was against this background that a joint Appeal was launched on 26 May by the Secretary-General of the United Nations, in New York, and the South African Co-ordination Conference (SADCC), in Harare, Zimbabwe.

The Consolidated UN/SADCC Appeal seeks US \$685 million for food aid and US \$150 million for non-food related activities (primary health care, water supply distribution, etc.), and US \$21 million for regionally-based co-ordination machinery.

In a lengthy document, the Appeal gives detailed descriptions of the situation in each of the ten affected countries. It lists only the most urgently required assistance. For although the needs of the SADCC

countries are greater in the non-food sector than those given in the Appeal, their Governments agreed to concentrate on only those humanitarian requirements which are seen as critical. Thus, although the Appeal is realistic and addresses only essential requirements for survival, it should be viewed as the first stage in a continuing process of monitoring and assessing emergency needs in the region. Furthermore, the Appeal stresses that all relief actions undertaken should provide a basis for post-drought recovery and long-term development efforts.

The Appeal document itself is the result of an Inter-Agency Working Group convened by the Department of Humanitarian Affairs (DHA) in Geneva from 20 April to 4 May



... and devastation on the land and on livestock.

F. Botts/FAO Photo



The President of Botswana, and Chairman of SADCC, Sir Ketumile Masire (third from right) addressing the Pledging Conference, with (from left to right) Mrs. S. Ogata, the High Commissioner for Refugees, Ms. C. Bertini, Executive Director of the World Food Programme, Mr. J. Eliasson, Under-Secretary-General for Humanitarian Affairs, Dr. S.H.S. Makoni, Executive Secretary of SADCC, and Dr. Josuha Nkomo, Vice-President of Zimbabwe.

DHA-UNDRO Photo

1992. With regard to food aid, the Working Group relied heavily on assessments of such needs made jointly by FAO and WFP during inter-agency missions to the field. The Working Group was attended by representatives, with extensive experience of the situation in the countries concerned, from the Food and Agriculture Organization (FAO), the World Food Programme (WFP), the World Health Organization (WHO), the UN High Commissioner for the Refugees (UNHCR), the UN Children's Fund (UNICEF), the World Bank, the International Monetary Fund (IMF) and Interaction, an American NGO. The draft document, produced by DHA as a result of this meeting, was then discussed and verified by SADCC representatives in Gaborone, Botswana, and Harare, Zimbabwe.

The Pledging Conference

At the time the Appeal was launched, an invitation was also

issued to a Pledging Conference, jointly sponsored by the United Nations and SADCC, to be held in Geneva on 1-2 June 1992 to mobilize resources in response to the Appeal.

The Conference, opened and chaired by the President of Botswana, and Chairman of SADCC, Sir Ketumile Masire, was attended by 59 Member States, 13 United Nations and Specialized Agencies, some 20 Inter- and Non-Governmental Organizations, and by the European Community, the World Bank and the International Monetary Fund.

Both the Appeal and the Conference itself illustrated a constructive and positive partnership between not only the UN and SADCC (the latter also actively participated in bilateral discussions with donor countries), but also between all members of the United Nations family and Inter-Governmental and Non-Governmental Organizations. It also signalled a decisive new partnership with the Bretton Woods

Institutions (i.e. the World Bank and the International Monetary Fund) who will be of crucial importance in the implementation of the continuum from relief to recovery to development.

Several speakers at the Conference commented favourably on the readiness of all the countries of the region, including South Africa, to strengthen regional co-operation, which could form a positive pattern for the future.

The World Bank and the International Monetary Fund spoke of the involvement of their institutions in the preparation and proceedings of the Conference, and of the necessity to think of the medium and long-term consequences of the drought. Together with representatives of several Non-Governmental Organizations, they stressed the need for, and expressed their willingness to engage in, information-sharing, co-operation and co-ordination in the entire relief effort.

At the end of the second day, the Chairman of the Conference made a statement, on behalf of all participants, in which all interested parties were strongly urged:

- to co-operate fully to ensure a co-ordinated appeal response to the drought;

- to guarantee the safe passage and facilitate distribution of humanitarian relief supplies via land, sea and air;

- to work closely with the national and regional institutions of Southern Africa and the UN Department of Humanitarian Affairs which has the responsibility of ensuring the co-ordination of the international relief efforts.

With particular reference to the conflict in Mozambique, the statement included a solemn appeal to all parties to refrain from military attacks on aircraft, ships and road vehicles delivering humanitarian supplies, thus ensuring the safe

passage of food supplies to affected populations, and called upon them to establish an immediate ceasefire and accelerate their efforts for peace and national reconciliation, to resolve outstanding issues impeding progress in the current peace talks, and to continue with substantive negotiations with a view to achieving a lasting political settlement.

At the close of the Conference, the Vice-President of Zimbabwe, Joshua Nkomo, welcomed the joint approach by SADCC and the United Nations, through the Department of Humanitarian Affairs, which resulted in the comprehensive Appeal; he warmly thanked all those who had responded to the Appeal with food and other material help.

Among important aspects raised at the Conference are the regional task force, with overall responsibility for the management of the relief efforts in the area, set up by SADCC, and a logistics Advisory Centre in Harare, established by SADCC and WFP. A Memorandum of Understanding which was signed after the Conference by SADCC and the Department of Humanitarian Affairs will ensure joint regular reporting on follow-up action. ■



DHA-UNDRO Photo

The opening session of the joint UN/SADCC Pledging Conference on the drought emergency in Southern Africa, held in Geneva on 1-2 June 1992.

Pledges announced at the Conference

- Against total cash requirements of some US \$856 million, pledges announced at the Conference totalled almost US \$600 million.

- Against total requirements of 2.5 million metric tonnes of programme food, pledges made totalled nearly 1 million mts.

Contributions were made by the following Member States: *Australia, Belgium, Canada, Denmark, Finland, France, Germany, India, Ireland, Italy, Japan, Liechtenstein, Luxembourg, Netherlands, Norway, Sweden, Switzerland, Tunisia, United Kingdom, United States of America; and also by the African Development Bank, and the European Community.*

Several Member States declared their intention of making further contributions on a bilateral basis or at a later stage.

Policies, Institution Building and Legislation for Land-Use Management in Disaster-Prone Countries

Guidelines for Senior Decision Makers and Planners

Prepared by Ernst J.A. Lohman, DHA-UNDRO

This paper was prepared on the basis of UNDRO Manual *Mitigating Natural Disasters*, Policy Section, in co-operation with David Oakley, Prof. E. Penning-Rowsell, and Dr. I. Davis.

Summary

The paper is based on UNDRO field experiences in disaster management in a number of countries in Africa and Asia. It indicates the need to establish suitable policies and institutions at local, national sub-regional and regional levels, as a pre-condition for a systematic approach to disaster management. Hazard and risk assessment studies without Government-approved legislation - in the form of land-use zonation rules, hazard specific building codes and other rules related to disasters - will not lead to systematic implementation of risk reduction programmes, as an integral part of development plans.

I. A Policy Framework for Disaster Management

Effective mitigation of disaster does not just happen. It is created. Moreover, it is created by hard work

within Governmental and Non-Governmental Organizations striving to reduce loss of life and property caused by natural disasters. The policy framework within which this occurs has three aspects:

■ **RISK ASSESSMENT**, to define the types and magnitude of disasters that may occur;

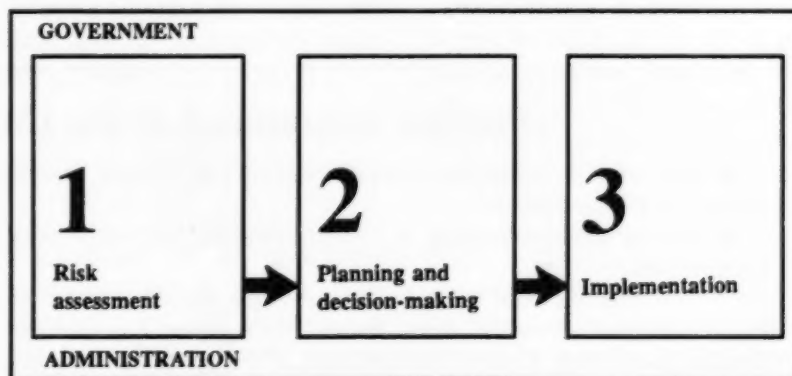
■ **PLANNING AND DECISION MAKING**, to organize a response to these risks;

■ **IMPLEMENTATION**, to translate plans and decisions into actions at field level.

The above three activities cannot operate in a vacuum. The *Context* is that of the *Government Administration*, which provides opportunities and constraints in planning for the mitigation of disasters.

II. A Strategy for Institutional Design

There are three important measures in the design of institutions and institutional arrangements for disaster mitigation. Care needs to be taken when adapting existing arrangements to meet these meas-



Policy framework diagram summarizing the context and the phases for the effective mitigation of disaster

ures, so as to fit disaster mitigation functions with other areas of government policy.

"Disaster occurrence is a dynamic and uncertain process"

The governmental framework for disaster management should exhibit potential for change and growth. As knowledge of disaster management grows, competence improves, and provincial and local communities develop self-reliance.

"Almost everyone, every agency, every voluntary group, industry, or government department has some measure which it can contribute to risk reduction"

Through institutional arrangements, the essential task of government is

to recognize the above potential, respond to initiatives, allocate responsibilities, and co-ordinate effort where necessary. It is also important for government to provide a lead by setting an example of disaster mitigation practice in all that they do.

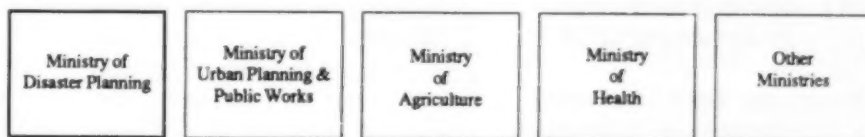
"Mitigation of disasters is wide-ranging in scope, and complex in its relationship with government ministries and agencies"

Models of Government Administration for Risk Reduction

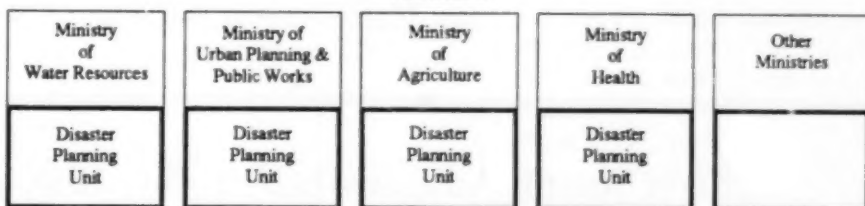
MODEL 1



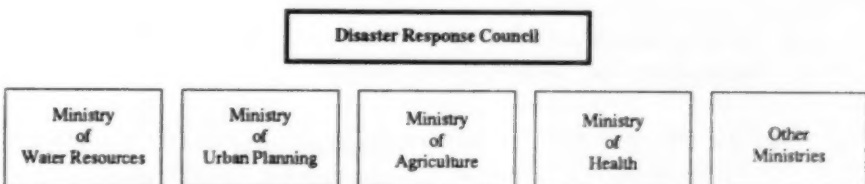
MODEL 2



MODEL 3



MODEL 4



Key:



For effective disaster preparedness planning and risk reduction, a clear allocation of roles and responsibilities is essential. Such a definition of tasks is needed between central, provincial and local government, and between sector agencies, to facilitate the necessary co-operation, co-ordination and efficient use of scarce resources.

It is important to remember that each country operates in a different economic and political environment which affects all that its government does. The international political situation and the state of the national economy of the disaster-prone country may be crucial issues. Plans for disaster mitigation therefore have to be realistic and be designed to operate within the current political and economic situation, rather than against it.

III. Institutional and Policy Appraisal

Evaluating the disaster mitigation effectiveness of government and its administration requires a three-fold approach:

- *Appraising existing government policies*
- *Appraising existing government practice*
- *Appraising existing government institutions*

To alleviate disaster-caused problems effectively, governments may have to stop or shift certain other policies which at first sight do not appear to be relevant to disaster mitigation. Complete policy shifts may be necessary, for example, to stop subsidizing agricultural developments in disaster-prone areas to which people may be encouraged to move. It may also be necessary to discontinue public building programmes in these areas, since any government development will encourage private developments and thus increase vulnerability.

Therefore, all government-related policy areas need to be reviewed by a National Disaster Organization, to prevent the build-up of vulnerability caused by the unintended effects of government land-use, agricultural or indeed any other policies. Implementing any such policy

shift may involve, or necessitate, institutional change.

This is because the institutional status quo may block policy change and thus inhibit comprehensive disaster mitigation. Any planned approach to disaster mitigation must also examine all government policies and practices which might be exacerbating vulnerability in the relevant area. Those sectors which need attention in this respect include at least the following: agricultural policy; building regulations; land-use planning; infrastructure policy; regional development policies; social security support services; forestry; and water resources. The questions to be addressed in this analysis of policy include the following:

1. Is any aspect of these government policies directly or indirectly contributing to the occupation of disaster-prone areas?
2. Are any government policies or practices directly or indirectly exacerbating the vulnerability of communities occupying disaster-prone areas?

Government Administration for Risk Reduction

The questions to be addressed in this analysis of policy include the following:

- Is any aspect of these government policies directly or indirectly contributing to the occupation of disaster-prone areas?
- Are any government policies or practices directly or indirectly exacerbating the vulnerability of communities occupying disaster-prone areas?
- What policy shifts are needed to reduce the vulnerability-increasing effects of existing government policies?

3. What policy shifts are needed to reduce the vulnerability-increasing effects of existing government policies?

IV. Legislation for Land-Use Management

Systematic and focussed hazard, vulnerability and risk studies can significantly contribute to land-use policy and planning as a major risk reduction option, provided proper legislation and permanent institutional arrangements are developed simultaneously. DHA-UNDRO is ready and keen to assist all disaster-prone countries to initiate such studies in order to protect the population and development efforts in disaster-prone regions in a better way.

DHA-UNDRO therefore recommends that disaster-prone countries should prepare hazard and risk maps for local and national disaster preparedness and risk reduction plans. These plans should be fully integrated in the local and national development plans. Land-use regulations should be established, with proper legislation for hazard and risk zonation and clear control, incentives and enforcement mechanisms. In order to initiate these tasks, initiatives should be taken at national level to prepare the following maps and reports:

1. National hazard maps for the various hazard types:

- *Fast impact hazards such as earthquakes, floods, cyclones, volcanoes, landslides.*
- *Slow onset hazards such as drought, desertification, erosion, etc.*

- *Technological hazards such as dam breakage, chemical/nuclear hazards, etc.*

2. National risk maps indicating all major existing developments, infrastructures and populations at risk (elements at risk).

3. National maps indicating all planned developments during the next 5-10 years (Areas at risk).

4. National maps indicating all potentially affected key facilities, lifelines, and population concentrations (Elements at risk over hazard).

5. Disaster Management Policy/Strategy documents indicating priorities for risk reduction programmes.

6. Special land-use zonation and building codes for disaster-prone areas, integrated in the national land-use zonation and building codes.

7. Once priorities have been set for risk reduction programmes, regional and local hazard and risk maps should be prepared, to guide local, national, sub-regional and regional preparedness and risk reduction plans. These plans should be integrated in the development plans at the different levels.

(For the practical implementation of such studies, a manual has been recently prepared: *Mitigating Natural Disasters* which is available from DHA-UNDRO upon request.)

V. Land-Use Regulation and Risk Reduction

Land-use regulation may be regarded as one of the most impor-

tant risk reduction measures. It may include requirements for open space in neighbourhoods, limit the height of buildings or prohibit, for example, certain types of housing. The type of regulation depends on the type of hazard.

An important problem in the regulation of land-use is the enforcement of land-use plans. Regulation may be problematic, especially within existing settlements. Relocation of neighbourhoods or even settlements can have far-reaching negative consequences in socio-economic terms. Laws represent restrictions for governments and communities but they are essential for disaster mitigation implementation for two reasons:

- *they establish safety standards*
- *they constitute a vital element in public education.*

However, there are persistent problems in their introduction and use. Often they are hastily drafted and enacted after a disaster to express political concern. To save time, they may be based on an inappropriate model that related to a totally different culture or economic situation. Another problem concerns law enforcement. Many poor countries simply cannot afford to set up an adequate system to enforce law. Consequently, legal controls lose their essential public respect. The final problem concerns relevance to the poor. Frequently, standards of building that require additional expenditure are enshrined in laws which are irrelevant to poor families. To them, the costs of disaster mitigation are an awesome burden.

DHA - UNDRO at Work

16 April - 15 June 1992

Relief: Mobilization and Co-ordination

■ **Argentina - Floods:** North-eastern Argentina was seriously affected by severe floods in early May. A state of emergency was declared in the provinces of Corrientes, Chaco and Formosa, and an estimated 80,000 persons had to be evacuated. In early June the Ministry of Foreign Affairs requested UN and international assistance to provide relief to the victims. Detailed emergency needs are being identified for an appeal to the international community. Two Situation Reports were issued by DHA-UNDRO on 9 and 19 June.

■ **China - Hailstorms:** Rain and hailstorms struck the provinces of Hunan and Sichuan between 18 and 21 April. 109 people were killed, 7.7 million were affected, more than 60,000 houses collapsed and about 400 thousand hectares of crop were damaged, according to Chinese authorities. International assistance was not requested by the Government. An information Report was issued by DHA-UNDRO on 15 May.

■ **Croatia - Shipment of Relief supplies:** Further to a request from the Italian Government, DHA-UNDRO organized, from its Pisa warehouse, a shipment of various relief items to Croatia. The tents, blankets, generators and kitchen sets, which were sent by road on 3 June, were destined for a camp of displaced persons in Salvore, Istria. On 4 June, the goods were handed over to the Red Cross in Umago (Istria) for distribution.

■ **Cuba - Earthquake:** A strong earthquake, considered to be the worst since 1932, occurred on 25 May in Granma province near the coast of south-eastern Cuba. The first shock, measuring 7.0 on the Richter Scale, was followed by over 300 aftershocks. Serious damage to buildings and the evacuation of almost 7,000 persons were reported by the UNDP/DHA-UNDRO Representative in Havana. DHA-UNDRO issued a Situation Report on 29 May and allocated a US \$20,000 emergency grant for the local purchase of relief material.

■ **Ecuador - Floods:** Subsequent to floods, mainly in the coastal region, due to heavy rains from March to June, approximately 100,000 families were exposed to health risks. A state of emergency was declared and an appeal for international assistance

was made by the Government. Six Situation Reports were issued by DHA-UNDRO as at 11 June.

■ **Iran - Floods:** Floods due to heavy rains inflicted damages to about 4,000 housing units, several hundreds of commercial buildings and 100,000 ha of farmland in northern Iran (Gorgan province) as well as substantial damage to farmland and cattle in the towns of Cashmere and Shirvan, in northern Khorasan. DHA-UNDRO issued an Information Report on 20 May.

■ **Iraq - Independent Evaluation Mission to the Gulf Region:** DHA-UNDRO provided complete logistics support for a mission from mid-May to mid-June which was linked to the "Humanitarian and War" project of the Thomas J. Watson Jr. Institute for International Studies, Brown University, Providence RI, USA and the US Refugee Policy Group. The report of the mission was finalized by mid-June.

■ **Kyrgyzstan - Earthquake/Floods:** During the second week of May, an earthquake measuring 7 on the Richter Scale struck the southern region of the Republic of Kyrgyzstan. This event occurred at the same time as torrential rains, which further affected the already precarious living conditions of the population. DHA-UNDRO established immediate contacts with the Ministry of Foreign Affairs in Bichkek and launched an appeal for international assistance. Two Situation Reports have been issued.

■ **Malawi - Drought:** In close co-operation with the UNDP Resident Representative in Lilongwe, DHA-UNDRO assessed the special needs for additional emergency assistance related to the drought situation. An expert will be assigned for an initial period of 12 months, to support the Res.Rep. in his co-ordination and monitoring tasks.

■ **Nicaragua - Volcanic Eruption:** Subsequent to the eruption of Cerro Negro volcano a United Nations inter-agency mission led by DHA-UNDRO and UNDP assisted the authorities in evaluating the damage, its impact on the national economy and its medium and long-term consequences. On 8 May, DHA-UNDRO issued a final report on this emergency, outlining the relief activities of the UN system and listing international pledges to the victims of the disaster, totalling US \$1.8 million, from governments, non-governmental organizations and UN institutions. The Governments of Australia and the United Kingdom channelled funds through DHA-UNDRO, to be used for the

emergency provision of shelter materials, water and livestock nourishment.

■ **Papua New Guinea - Floods:** Following 3 months of exceptionally heavy rains, the region of the Sepik river experienced unprecedented floods. At the request of the Government, DHA-UNDRO fielded, on 30 May, a relief officer to assist the UN Disaster Management Team and central authorities in the assessment of damage and relief-rehabilitation requirements. DHA-UNDRO issued an Information Report on 6 May.

■ **Paraguay - Floods:** Heavy and continuous rainfall since April caused substantial rise in the levels of the Paraguay and Parana rivers and their tributaries. In some areas water levels reached historical records causing extensive flooding in Paraguay. Upon request from the Government, DHA-UNDRO launched an appeal for international assistance to the flood victims. About 75,000 people were affected as of early June. DHA-UNDRO provided a cash grant of US \$20,000 for local purchase of relief supplies and issued four Situation Reports.

■ **Romania:** The acquisition, by DHA-UNDRO, of medical equipment and tests for hospitals in Bucharest was made possible thanks to an Italian contribution of approximately 1.6 million. The negotiations with the Romanian medical authorities were carried out in close co-operation with the UNDP office and the WHO representative in Romania.

■ **Sierra Leone:** Two DHA-UNDRO delegates left for Sierra Leone on 13 June to review the on-going relief programme, expected to be completed at the end of June, and to follow up the constantly changing situation of displaced persons.

■ **Turkey - Erzincan - Earthquake Relief Review:** An evaluation of the relief activities undertaken following the earthquake which struck the region of Erzincan in Turkey on 13 March was carried out through seven meetings held at DHA-UNDRO. Evaluation questionnaires were also sent to twelve international search and rescue teams that took part in the relief operations. Recommendations on lessons learned in order to improve the effectiveness of such activities in the future are now ready for implementation.

■ **Uruguay - Floods:** An Information Report was issued by DHA-UNDRO on 12 June, following continuous heavy rains and floods in the north-west of the country. The situation was aggravated by floods in north-eastern Argentina. About 5,000 people had been evacuated by mid-June.

■ **International Search and Rescue Advisory Group (INSARAG), Regional Group for the Americas:** Three DHA-UNDRO delegates attended the preparatory meeting for the establishment of the INSARAG Regional Group for the Americas, held in Phoenix, Arizona on 25 - 26 May, and hosted by the US Office of Foreign Disaster Assistance (OFDA). Among other issues, the meeting discussed opportunities for the INSARAG

initiative to enhance current disaster management programmes in the region and a regional SAR work plan. It is hoped that the inaugural meeting of the Regional Group will be held in the last quarter of 1992.

■ **French Consortium for marketing and Promotion of Civil Defence Equipment and Engineering (DEFENCiv):** Three DHA-UNDRO delegates attended the meeting organized by DEFENCiv on 25 May. Presentations were made on the formation of the new Department of Humanitarian Affairs, the Directory of International Search and Rescue Teams, the establishment of the International Search and Rescue Advisory Group (INSARAG) and related activities, and the Register of Stockpiles of disaster relief items available for international assistance. Members of the Consortium expressed their willingness to assist, when required, in the rapid location of specialized, infrequently-used relief supplies.

■ **Workshop on "Missions chirurgicales en situation d'exception":** A DHA-UNDRO delegate attended this workshop which took place in Marseille, France, on 29 - 30 May and which aimed at defining the role, functions, and "training" requirements of a modern military medical team (MMT) in the field of humanitarian operations. The workshop was chaired by the French Minister of Health, M. B. Kouchner and attended by representatives from 13 countries.

■ **17th Inter-Agency Procurement Working Group (IAPWG):** From 1 to 3 June, a DHA-UNDRO delegate took part in the 17th IAPWG, held in Oslo, Norway. This annual meeting, brings together the Chiefs of Procurement of all the UN family and of various departments of New York Headquarters.

Discussions focussed on a review of the 1991 activities of IAPSO (Inter-Agency procurement Services Office), including the publication of various supplier catalogues and standardization of items of interest to a number of participants.

The 17th IAPWG was followed by "Business Contact Days", organized by the Norwegian Export Council in order to allow the participants to get acquainted with various Norwegian suppliers.

■ **Use of Military and Civil Defence resources/informal debate:** This project was initiated in October 1991 at the request of the representatives of Member States attending the NERS IV meeting. Its objective is to evaluate the possibility of using international military and civil defence assets for humanitarian operations in the immediate aftermath of sudden emergencies. DHA-UNDRO sponsored an informal debate on planned activities among UN agencies, humanitarian organizations and military experts which took place in Geneva on 11 - 12 June.

■ **Co-ordinating Committee Meeting between DHA-UNDRO and JICA:** On 10 - 11 June, a consultation team from the Japan International Co-operation Agency (JICA), visited the DHA-UNDRO office in Geneva. A series of discussions were held with DHA-UNDRO officials on the use of the DHA-UNDRO

Warehouse Pisa and the release of Japanese relief goods. Following the meeting, the team visited the Pisa Warehouse for an inspection of the Japanese relief materials in stock.

■ **IVth Regional Conference of European National Red Cross and Red Crescent Societies:** "The new Europe needs the new Red Cross" was the title of the Conference which was held in The Hague, Netherlands, from 18 to 22 May. DHA-UNDRO was represented at this Conference, during which some 30 existing Societies, plus 17 Societies in formation from Eastern Europe, examined new forms of co-operation and assistance.

■ **A DHA-UNDRO delegate was invited by Caritas Internationalis** to make a presentation on disaster communications at its Emergency Aid Group Meeting, held in Rome on 11 June.

Disaster Mitigation

■ CARIBBEAN:

□ **IDNDR Regional Conference for the Caribbean:** A DHA-UNDRO delegate took part in this conference for 140 participants held in Jamaica on 26 - 29 May. He gave one of the introductory addresses and a presentation on Caribbean vulnerability, acted as adviser to the country working groups and served as panel member and chairman of different plenary sessions. The meeting helped to review the status of disaster reduction activities, to indicate future priorities and to further involve senior ministerial officials in disaster mitigation.

□ **Disaster Management Training Workshop for Jamaica & Adjacent States:** DHA-UNDRO provided one of the resource persons along with others from UNDP, WHO and PAHO, for the country-level training course held in Kingston, Jamaica, from 1 to 3 June, for Bahamas, Belize, Bermuda, Cayman Islands, Jamaica, and Turks and Caicos. The functions and interactions of the UN system donors and national authorities were reviewed for relief management and mitigation planning.

■ **Colombia/Ecuador:** In mid-May a DHA-UNDRO delegate held a series of consultations in both countries on the ongoing DHA-UNDRO Disaster Mitigation Projects with senior officials of the participating institutions, to review the activities implemented hitherto and to update Work Plans for 1992. The DHA-UNDRO Technical Assistance projects in Ecuador and Colombia aim at enhancing national capabilities and self-reliance in coping with disasters.

■ **Nepal:** Representatives from the Government of Nepal and a DHA-UNDRO delegate met from 30 May to 3 June to discuss project proposals on flood mitigation, fire preparedness and to assess the implementation of the current DHA-UNDRO project.

■ **Peru:** An officer of DMB carried out a mission to Peru on 16 - 18 May to prepare the final version of the DHA-UNDRO Disaster Mitigation Programme for Peru. The Project will start on 1 July and last three years. Three pilot subprojects will develop a comprehensive methodology to mitigate volcanic eruptions, earthquakes, tsunamis and to create a National Disaster Management data banks.

■ **Philippines:** A DHA-UNDRO member participated in the International Scientific Conference on the Mt. Pinatubo Volcanic Eruption which took place in Manila on 27 - 30 May.

■ **Yemen:** From 17 to 31 May, a DHA-UNDRO delegate from the Disaster Mitigation Branch undertook an evaluation mission to Yemen where he met with members of the Supreme Council for Reconstruction, the Committee for Emergency and Natural Disasters, and the Executive Office for Reconstruction. The main objective of the mission was to assess the Earthquake Reconstruction Programme in Dhamar, launched in 1983 in the aftermath of the December 1982 earthquake, and to draft guidelines for the A' Udayn earthquake reconstruction programme, based on lessons learnt from the Dhamar programme.

■ **Visit of the CIS Delegation to Geneva:** A Delegation of the Civil Defence of the Commonwealth of Independent States visited DHA-UNDRO Geneva from 2 to 9 May. The delegation consisted of Col. General N. Dolgin, Deputy Chief of the Civil Defence and General Y. Souldin, Chairman of the Science Committee. The delegation gave DHA-UNDRO a video film on the Joint UNDRO/UNDP/USSR Training Seminar on the Strategy of Disaster Preparedness Planning, held in Moscow from 28 October till 1 November 1991. The film focusses on the major preparation stages of the Training Seminar, its working sessions, field training exercises and social activities. The film is being distributed to all seminar participants. It is also available to interested organizations upon request. In addition, the delegation presented DHA-UNDRO with selected papers from the seminar. DHA-UNDRO plans to print them as proceedings of the seminar and to distribute them to all concerned by the end of 1992. The delegation confirmed its availability to co-operate in the future to improve disaster preparedness planning in developing and other disaster-prone countries, and to provide the necessary facilities to organize further joint international training events.

Information, Communications, Exchange of Views and Contacts

■ **Southern Africa Drought:** The Department of Humanitarian Affairs organized an International Pledging Conference on the drought emergency in Southern Africa, which was held in Geneva from 1 to 2 June. The conference, under the joint auspices of the United Nations and the Southern African

Development Co-ordination Conference (SADCC), sought to assist ten countries in Southern Africa affected by a drought which threatens 18 million people in the region with starvation, even famine. The Conference, which was chaired by H.E. Sir Ketumile Masire, President of the Republic of Botswana and Chairman of SADCC, was attended by 276 participants from 59 countries, 16 United Nations agencies and institutions, 8 Inter-Governmental Organizations and 14 Non-Governmental Organizations. Mr. Jan Eliasson, Under-Secretary-General for Humanitarian Affairs, represented the Secretary-General. As of 5 June, an amount of US \$600 million had been pledged against the needs in the consolidated UN-SADCC Appeal, from 22 donor countries, the EC and the African Development Bank. Another four governments announced their intention to contribute at a later stage.

■ On 20 May, the **Committee of Ministers of the Council of Europe** agreed that DHA-UNDRO participate in the **Open Partial Agreement** on the organization of relief in major natural and technological disasters, including prevention measures.

■ **DHA-UNDRO/UNDP Disaster Management Training Programme**

□ **Regional Disaster Management Training Workshop for Anglophone and Lusophone Countries of Africa, Addis Ababa, Ethiopia, 20 April - 1 May:** The workshop held at the Ethiopian Red Cross Training Centre, was attended by the UNDP Deputy Resident Representative, national officials from 16 field offices, representatives from ICRC, IFRC, NGOs and UN agencies regional representatives.

The main objectives of this workshop were: - to increase participants' knowledge of hazards in Africa and resulting disasters; - to identify ways of linking a response to disasters with the process of development through the inclusion of preparedness and mitigation opportunities in the country programming cycle; - to increase skills in emergency and disaster management and in the planning and running of training events; - to increase the ability of UN offices to co-ordinate the development of country level workshops leading to strategic plans for disaster response, preparedness and mitigation.

□ **Turkey Country Workshop:** A DHA-UNDRO delegate participated as a resource person in a country workshop held in Ankara, Turkey, from 1 to 5 June. The workshop, which was attended by officials from both central and provincial government levels in Turkey, the Turkish Red Crescent Society (Kizilay) as well as by members of the United Nations DMT (WHO, UNICEF, WFP, UNHCR, etc.), donors' representatives and the IFRC, focussed - through a case study - on the lessons learned from the recent Erzincan earthquake. It also included an earthquake simulation exercise. The workshop adopted, *inter alia*, a list of recommendations to be followed up by a strategic plan for emergency management. ■

UNIENET Corner

The *United Nations International Emergency Network* (UNIENET) will be "on-line" with hard copy updates every two months in the "UNIENET Corner" of UNDRO News. Look to this section for an update on network membership, facilities, users, etc.

New participants:

We welcome the following new users. **Fire Earth Station USA** (UNX122), **Canadian Council for International Cooperation Ottawa** (UNX175), **Canada World Relief Ontario** (UNX176), **International Organization for Migration Geneva** (UNX177), **FAO Statistics Division Rome** (UNX180), **Tecnopolis CSATA Italy** (UNX182), **Lincoln Trust Fund Australia** (UNX181), **Peace and Disarmament Society of Kerala India** (UNX083), **National Women's Welfare Centre Kerala India** (UNX117), **Office for Cooperation between WHO (World Health Organization) and the Republic of Croatia** (UNX133), **OXFAM Headquarters UK** (UNX144), **Slovenia Academy of Sciences** (UNX186), **UN EPPG Ethiopia** (UNX187), **CERIM Montpellier** (UNX189), **PAHO St Lucia** (UNX190).

New Bulletin Boards:

As of 1 July more Disaster Management Information is available on the following new Bulletin Boards:

■ **APPEALS:** The International Federation of Red Cross and Red Crescent Societies (IFRC). (UNX126). Monthly Operation Update and the Monthly Bulletin.

■ **DMTP:** Disaster Management Training Programme. (UNX192). Workshops, institution contacts (Management, RCI's Trainers), UN National Focal Points and also Publications.

■ **ICDO:** International Civil Defence Organization. (UNX052). Names and addresses of Civil Defence National Officials and a list of Conferences, Training and Activities.

Annual User Survey:

A User survey was sent out in May, as a follow-up to the Eighth UNIENET Board Meeting. Responses were very helpful in defining improvements to the network in order to make it more useful and practical.

Reminder:

Reminder to all UNDP, UNCED, UNEP, PAHO, UNISER, UNICEF network users - you have access to UNIENET (e-mail exchange and databases access) if you type at system level: >UNIENET.

*Should you need more information on UNIENET, do not hesitate to contact our System Manager,
Rosa M. Delgado, (UNX002).*

Disaster Mitigation: The Single-Country Approach Colombia

by Dusan Zupka, DHA-UNDRO

Introduction

Disaster mitigation programmes were designed to protect people, property and the environment against the destructive effects of natural and man-made disasters that might significantly slow down the economic and social progress of the disaster-prone countries.

Disaster mitigation programmes are generally based on two principal elements of the disaster management continuum: prevention and preparedness. Under different circumstances and conditions (e.g. the size of the area affected by a disaster) a regional, subregional or single-country approach to disaster mitigation activities can be undertaken.

Colombia Project

In the case of Colombia, which is continually threatened by the whole spectrum of natural and man-made hazards, a country approach was selected by the responsible national authorities assisted by UNDRO (now DHA-UNDRO). This approach sought to identify dangerous disaster scenarios; to develop a range of effective measures to cope with such

scenarios; and to disseminate the proposed counter-measures on a national and international scale.

Since 1987 UNDRO has developed and assisted the Colombian national authorities to implement a Programme of Disaster Mitigation Activities designed to mobilize all available national resources, to strengthen and expand the national disaster preparedness system and actively implement prevention

measures. The importance of disaster mitigation in the context of development has been constantly analysed and emphasized.

The comprehensive programme covers the full spectrum of important disasters likely to occur in Colombia, including earthquakes, tsunamis, landslides, volcanic eruptions, floods, industrial hazards, training for search and rescue, and general disaster management issues. The scenarios for six different sub-programmes have been developed in areas where related natural or man-made hazards are likely to take place in the future. An additional significant feature of this project was the establishment of a complete cycle of disaster mitigation activities for each of the above disaster types. From late 1988 until the present, the logical sequence of disaster mitigation activities was systematically applied for potentially dangerous scenarios: hazard evaluation, risk assessment and mapping, strengthening of monitoring and alarm systems, technology and



Nevado del Tolima Volcano

D. Zupka/DHA-UNDRO Photo

know-how transfer, emergency planning, preventive measures, integration of disaster mitigation considerations into development plans, public information and training, and community involvement in simulation exercises.

In the highest risk areas, all the existing relevant scientific, technical, planning and political institutions have been mobilized. The number of national participating organizations is over 80. These integrated and cross-sectoral efforts have been successfully co-ordinated by a National Disaster Management Office (ONAD) which was created at the same time as the programme began. ONAD is a part of the Colombian Presidency, and therefore, in addition to its strong motivation, has sufficient political weight to utilize the available resources in the most efficient and effective manner.

The Nevado del Ruiz Volcano eruption in 1985 buried alive over 20,000 people in Armero City; this extremely painful experience led the Colombian Disaster Management authorities to shift their priorities from disaster relief to disaster mitigation and reduction. They learned to consider disasters as a consequence rather than as a cause of loss and, in particular, strengthening the ability to cope of people occupying dangerous areas, became the focus of the Colombia Project.

The UNDRO/ONAD Programme of Disaster Mitigation Activities was officially launched in late 1988 with financial support from the Canadian International Development Agency.

Initially ONAD and UNDRO officials held a series of working



D. Zupka/DHA-UNDRO Photo
Cali, Capital of Valle del Cauca Department.

sessions with national institutions and the people who would be involved in project activities. Each segment of the disaster management continuum was carefully discussed in terms of time scales, technical assistance and training needs, equipment requirements and levels of co-ordination, participation and responsibilities.

The following pilot sub-projects areas were identified for different types of disaster scenarios:

Cali and its surroundings/ Earthquake

Cali, with almost 2 million inhabitants, is the third largest city in Colombia. It is located in a region with six seismic sources which in the past have affected the city with maximum intensities of up to VIII on MM scale.

Tumaco and the neighbouring coastal areas/Tsunami

Tumaco has over 60,000 inhabitants and was struck by the devas-

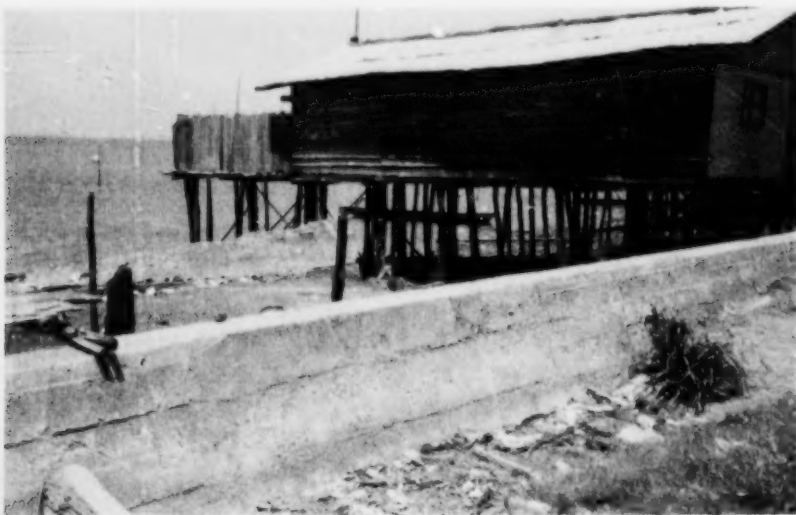
tating 1906 and 1979 earthquakes and tsunamis.

Paz del Río and its surrounding areas/ Landslides

Landslides are common in the Andean Region of Colombia because of the rugged terrain and the steep hillsides. Masses of soil on the normally stable mountainsides slip dramatically when heavy rainfall or an earthquake lower their stability.

Ibague and neighbouring valleys/ Volcanic Eruption

Ibague, the capital of Tolima Department, is a city of 400,000 inhabitants. The Tolima Volcano is over 5,000 metres high and, although very close to the Equator, is permanently covered with ice. When volcanic activity causes a rise in temperature, the ice melts and drains as mudflows, into the valleys. Such mudflows (lahars) can travel dozens of kms and from the summit of the Volcano can reach the town of Ibague in less than an hour.



D. Zupka/DHA-UNDRO Photo

Typical type of building in Tumaco

Combeima River/ Flash floods

The Combeima river basin starts at an altitude of over 5,000 metres while the Ibaguë river, only a few dozen kilometres downstream, lies at 1,200 metres above sea level. In the past, several flash floods have destroyed villages spread throughout the Combeima basin and have caused considerable damage to the lower parts of Ibaguë.

Bogotá/ Industrial Hazards

The principal outputs are represented by:

- Establishing of "Colombian Advisory Committee on Industrial Risks"
- Establishing of the operational "Centre for Safety Information on Dangerous Substances"
- Training activities and workshops
- Industrial hazard map for Bogotá.

Search and Rescue

The helicopter-borne search and rescue team was established,

equipped and trained.

General Disaster Management Issues

Strategies and procedures for disaster mitigation and relief activities have been set up. The necessary knowledge of methods and techniques was broadly disseminated during national and international seminars and by issuing educational and training materials.

The first five topics, namely earthquakes, tsunamis, landslides, volcanic eruptions and flash floods, have been addressed in an integrated and multidisciplinary manner. The typical sequence of actions was represented by identification of major hazards, demarcation and mapping of the affected area, determination of the impact on people, property and the environment, and by designing scenarios of probable disaster situations.

This basic diagnosis provided guidelines for formulation of the preventive measures to protect the population and its environment

through emergency plans, including monitoring and warning systems, the dissemination of the results of the studies through programmes intended for the population at large, and the preparation of teaching materials for formal education and evacuation exercises.

Mitigation measures have been proposed to reduce the destructive effects of violent natural phenomena by analyzing the endangered areas through simplified microzoning methods and techniques used in urban and rural planning. In the case of urban planning, the safest areas are assigned for the vital urban components, such as high-density urbanization, important economic activities and life-lines. The most dangerous sectors are designated for parks, open recreation areas, broad avenues and other appropriate use.

The salient features of the UNDRO/ONAD Programme of Disaster Mitigation Activities in Colombia which contributed significantly to its success can be summarized as follows:

- Political support provided at the highest level, that of the Office of the President of the Republic of Colombia.
- Comprehensive programmes integrating all important disasters likely to happen in Colombia.
- The activities involved cover the complete disaster mitigation cycle.
- A great number of national institutions are actively involved in multi-disciplinary way and effectively co-ordinated by ONAD.
- The constant endeavour to find appropriate mechanisms and strategies to incorporate disaster mitigation into the process of social and economic development. ■

Improving Relief Supply Management: A Pan American Initiative

Last December, the United Nations General Assembly took a decisive step toward improving humanitarian assistance, adopting by consensus Resolution 46/182 which strengthens the role of the U.N. in co-ordinating international humanitarian assistance.

One area that will particularly require specialized support from the international community is managing relief supplies at their point of entry into a disaster-affected country. Stories abound of inappropriate supplies being dumped on countries that already have more to cope with than they can handle. In fact, every disaster expert on the lecture circuit has his or her own collection of anecdotes - from wool blankets sent to tropical areas, to left-foot-only shoes, to dangerous pharmaceuticals and baby food, or obsolete medical equipment.

There are several ways to minimize these problems. On the recipient side, countries should be more selective in what they request, learning to diplomatically say "no thanks". On the donor side, countries should step up public awareness and education campaigns about what is, and is not useful. Under the aegis of PAHO/WHO, both sides periodically sit down and frankly discuss these issues *before* they become problems. But no amount

of pre-disaster co-ordination will suppress the urge on the part of the public and politicians to respond impulsively - and as a result too often inefficiently - to sudden-impact disasters. Therefore, managing the incoming flow of donated relief supplies, a large part of which are unsolicited and of little use, will remain a challenge for many disaster managers in the years to come.

Disaster relief authorities face two distinct problems when trying to manage emergency supplies as they enter a disaster-affected country. First, how do they distinguish between supplies that are useful and urgently needed and those that are simply clogging up the system? The former require priority attention and distribution; the latter should *not* compete for attention and space. The second problem involves knowing what type of supplies have been received. Sketchy information, such as "*x*" tons of medical supplies were received today won't help relief officials to make sound decisions. They need more precisely-defined, technical information including therapeutic categories such as antibiotics, analgesics, bandages, or vaccines. With this type of information, agencies facing shortages of much-needed items may be able to identify sources in other institutions that have received a more

generous consignment of the commodity.

To make these situations even more difficult, pharmacists and other skilled professionals - in short supply in normal times - are just too busy responding to other more pressing health needs to be available in times of disaster to make detailed inventories or manage donated medical supplies.

And so, the challenge of managing relief supplies at the point of entry provides a splendid opportunity for post-disaster co-operation among countries, in the spirit of U.N. Resolution 46/182.

● The SUMA Project

Thanks to the financial support of the Government of the Netherlands, PAHO/WHO will soon introduce a new project for supply management, the SUMA Project. SUMA will create and staff subregional standby teams of health personnel who will be specially trained to sort, classify and manage donated relief supplies, using up-to-date computer technology.

Imagine that a disaster has just struck one of the countries participating in the SUMA Project. The team would travel to the disaster

site to render the following services to the relief authorities:

- make an inventory of the incoming health-related supplies, including medicines, medical and surgical supplies, and other items such as tents, generators, water supply and sanitation equipment. Wherever applicable, information on therapeutic categories (for medicines) and intended uses would be included.

- sort the relief supplies and mark those for which an immediate and urgent use exists with specially-designed, self-adhesive color labels, to distinguish and separate them from the bulk of items that have no practical value at the moment. Surprisingly, the latter often constitutes more than 50% of the donations.

- identify and clearly label items that require special handling, such as refrigeration, or that should be used quickly because of their short shelf life.

- enter data on site using portable computers, and prepare detailed reports for national relief authorities, for consignees taking delivery of the shipment; and for donors.

- provide authorities with daily detailed lists that include information on the origin of the shipment, the consignee, the type of product, therapeutic categories, etc.

Although the SUMA Teams will be on site and operational as soon as possible following the impact of the disaster, their role is not to provide long-term support to a stricken country. As they work, team

members will also train their counterparts in the affected country so that responsibility for the operations becomes a national concern within a matter of days.

In addition to training prior to their missions, SUMA Teams will receive other support including:

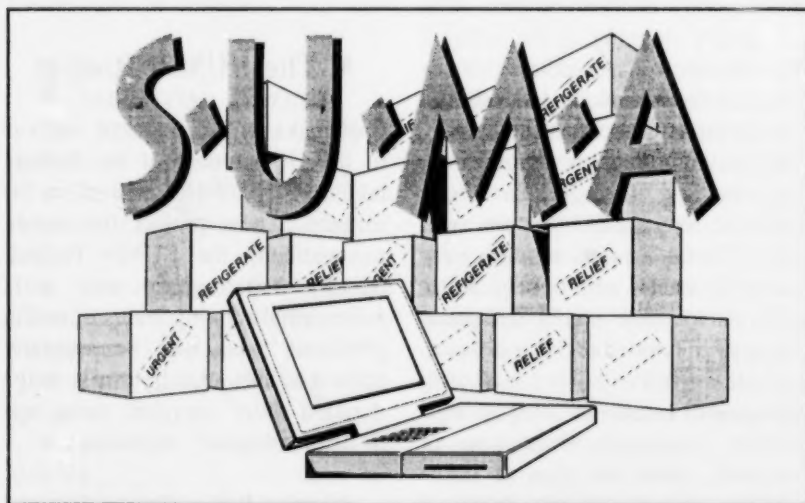
- a sophisticated, user-friendly database designed especially for this Project;
- laptop computers, printers, xerox machines;
- self-sustained power sources;
- on-site communications by hand-held radios;
- satellite communications;
- support staff.

Disaster-prone countries will begin by designating a Project focal point and identifying volunteers to serve on the standby team. The national focal point and volunteers will assume the overall direction and supervision of team activities in case of disasters in their own country.

The importance of the SUMA Project and the Teams lies not only in the contribution they will make to managing post-disaster relief supplies. SUMA will be the joint response of Latin American and Caribbean countries *themselves*, to face the type of problems that no developing country alone is fully equipped to handle were it not for subregional solidarity and a sense of neighbourhood. ■

*This article appeared in the January 1992 issue of **Disasters: Preparedness and Mitigation in the Americas**, the quarterly newsletter from the Emergency Preparedness Program of the Pan American Health Organization, Regional Office of the World Health Organization, and is reprinted with their permission.*

Relief supplies that are *urgently* needed should be clearly marked to receive priority attention



Drawing by A. Oyeleye/PAHO

The new SUMA Project should help to ease the challenge of managing incoming disaster supplies at the point of entry.

ANNOUNCEMENTS

Geophysical Institute of Ecuadorian National Polytechnic School receives SASAKAWA/DHA-UNDRO Disaster Prevention Award

The Geophysical Institute of the Escuela Politécnica Nacional (ESPONA), from Quito, Ecuador, was selected, on 13 May 1992, as this year's laureate for the Sasakawa/DHA-UNDRO Disaster Prevention Award, in recognition of its outstanding achievements in disaster prevention and preparedness.

The five-member international Jury from Africa, Australia, Europe, Latin America and Oceania, which met on 6 and 7 May in Geneva underlined the Institute's leading role in the field of volcanic and seismic disaster mitigation.

During its ten years of existence, the Geophysical Institute of ESPONA assisted in the formulation and implementation of various

innovative disaster mitigation projects and management of volcanic crises in Ecuador. It was also actively involved in similar activities in several Latin American countries, to improve hazard mapping, risk evaluation, scientific monitoring of and response to volcanic and seismic emergencies.

ESPONA has prepared and published a series of volcanic hazard and risk maps, organized international seminars and training workshops in volcanology and seismology, as well as public awareness programmes, and, since 1975, has acted as advisor to the Civil Defence in Ecuador and neighbouring countries.

In the opinion of the Jury mem-

bers, who chose the laureate from amongst 18 candidates, the research and achievements of ESPONA best exemplify the activities which the Sasakawa/DHA-UNDRO Award is intended to encourage. The Award, which carries a prize of US \$45,000, was created in 1986 and endowed by Mr. Ryoichi Sasakawa, President of the Japan Shipbuilding Industry Foundation, for outstanding achievements in the field of disaster prevention and preparedness.

The 1991 Award was attributed to Prof. Franco Barberi, President of the Volcanic Group of Italy, in recognition of his significant contribution to volcanic disaster mitigation research and activities. ■

DHA-UNDRO Disaster Library Kit

Disaster Library KIT for the South Pacific countries:

Within the framework of the DHA-UNDRO/South Pacific Programme Office our Disaster Management Reference Library has developed a collection of approximately 150 bibliographic informa-

tions on specific disaster-related publications relevant to disasters in the South Pacific countries (i.e. cyclones, floods, earthquakes, volcanic eruptions, landslides, drought, tsunamis), as well as information on general disaster and environmental management.

The KIT will help newly-es-

ablished and future disaster centres in the region to create their own disaster libraries. The role of such disaster libraries is, principally, to provide the disaster centres with adequate documentation for their own needs, and secondly to permit easy and rapid information and communication between the centres. ■

The OAU/DHA-UNDRO Questionnaire on the Status of Disaster Mitigation in Africa

The questionnaire served as a basic conference document for the "Regional Meeting on Disasters in Africa" which took place in Addis Ababa, 13-17 April 1992. The questionnaire, which had been sent to all 51 OAU (Organization of African Unity) Member States, was completed by 32 countries, i.e. a 63 per cent response rate. The conclusions drawn from the responses, compiled by Ernst Lohman, Marcel Mikala and Laurence Melet, DHA-UNDRO, are as follows:

Disaster profile

Natural and man-made disasters have a heavy impact not only on human lives but also on national economies in OAU Member States. The lives of 133 millions of human beings in OAU States are constantly threatened by disasters, primarily by drought, floods and soil erosion but also by cyclones, fires, landslides, civil strife and earthquakes. Drought has the heaviest impact on 125.2 million citizens throughout the continent.

The most vulnerable regions are the poorer rural areas and also major cities, which are, in addition, often affected by industrial accidents.

About one-third of the countries indicated, on the basis of events during the past decades, an average loss due to disasters of about US \$50 million per event per country. Such events were estimated to have caused between 3 and 30% loss of the GNP for the year of their occurrence.

Status of Mitigation

Approximately two thirds of the OAU States have clearly identified the most hazardous regions in their own countries, one-third have also defined the corresponding risk levels. Preparedness plans at various stages and for different sectors have been prepared by about two-thirds of the Member States, but in most cases only for agricultural areas. Also two-thirds of these countries have defined basic criteria and standards for such plans and are drafting legislation for land-use planning and special building codes.

Training for Disaster Management

In most OAU States there exists some form of public information and education activity, but up to the present only seven countries

(out of 32) have developed a strategy for disaster management training.

Institutional Framework

Most OAU States have established a National Committee to manage the response to disasters. The majority of these organizations, however, act on an "ad hoc" basis. Two-thirds of OAU States were able to identify responsible organizations for hazard and risk assessment, mitigation planning, planning standards and for implementation of risk reduction programmes.

Resources

Lack of resources is one of the major problems in disaster-related matters. Nearly half of the countries declared that a special disaster fund had been established in the past, mainly for relief purposes. Only half of the OAU States believed that their staffing levels were appropriate to their situation, and only 20% are satisfied with the amount of available equipment. About one-third considered the funding for mitigation, made available in the national budget, as

ranging from "limited" to "appropriate". Another one-third characterized funds for this purpose as ranging from "very limited" to "nothing". Investments quoted for risk reduction range from US \$600,000 to US \$5 million and in most cases were included in other development programmes.

Sub-Regional and Regional Level

The majority of OAU States when asked to identify the most disaster-prone countries of their region, mentioned the States of the Sahel Zone, Chad, Ethiopia, Mozambique, Somalia and Sudan. As possible co-operation mechanisms CILLS was identified first; OAU, IGADD,

DHA-UNDRO SADCC and PAC/PR were also mentioned; IDNDR was also requested to give highest priority to the training of decision makers and planners and the creation of regional networks and hazard and risk assessment.

Priorities for future Mitigation Needs

Highest priority was given to training, hazard and risk mapping, preparedness plans, monitoring and warning systems and information needs. Major problems restricting project implementation were identified as: lack of funds, equipment, trained staff, and lack of good planning and co-operation. However the situation could be improved most

effectively by increasing funding for mitigation, public awareness and education, increasing training for disaster managers, improving the institutional base for disaster management and by providing essential equipment.

Priorities for a Future Mitigation Strategy

The OAU Member States priorities are: to create a permanent disaster-management committee at national level; to estimate sub-regional co-ordination in disaster mitigation; to integrate all disaster knowledge within the agencies, departments and NGOs; and, last but not least, to stimulate wider investigation and research. ■

PUBLICATIONS

Dossier publié par Action d'Urgence Internationale

Un dossier intitulé "Urgence pour le développement, les catastrophes naturelles et le Tiers-Monde : que faire?" a récemment été publié par Action d'Urgence Internationale, à l'occasion du Sommet de la Terre (Rio).

Son objectif est de mieux informer sur les causes (dégradation de l'environnement, pauvreté ...) et les conséquences des catastrophes naturelles afin de renforcer l'efficacité de l'aide d'urgence internationale et de souligner l'importance de la prévention.

Nous publions ci-dessous un bref résumé des questions soulevées dans ce dossier.

■ Tremblements de terre, inondations, cyclones ... font de plus en plus de victimes et de dégâts dans les pays du Tiers-Monde. Pourtant, des phénomènes naturels similaires sont pratiquement inoffensifs au Japon ou aux Etats-Unis! Pourquoi ?

■ Quelles sont les responsabilités de la pauvreté et de la dégradation de l'environnement ?

■ Quelles sont les conséquences des catastrophes naturelles ? Les sinistrés sont-ils passifs à la suite du choc qu'ils viennent de subir ou, au contraire, sont-ils les principaux acteurs dans les domaines du sauvetage et de la reconstruction ? Ont-

ils tout perdu ? Quels sont leurs besoins ?

■ Comment améliorer l'efficacité de l'aide internationale ? Comment faire pour qu'elle allège réellement le poids de la catastrophe, renforce les initiatives des sinistrés et réduise leur vulnérabilité face aux risques naturels ? Comment l'aide internationale d'urgence peut-elle contribuer au développement ?

Pour tous renseignements contacter : Pascal Erard, Action d'Urgence Internationale, 10, rue Félix Ziem, 75018 - Paris.

Tél.: (1) 42647588, Fax.: (1) 42540073, Telex : 281567 F.

CONFERENCES

Fourth International Course on Health and Disasters Preparedness

The *Fourth International Course on Health and Disasters Preparedness* will be held from 27 July to 7 August, 1992 in Brussels. Jointly sponsored by the World Health Organization and the Government of Belgium, the Course will focus on public health risks, information systems, management of preparedness and planning, and assessment of needs within the specific context of Health Preparedness and Relief. This two week course will be preceded by a one week optional computer course.

Inquiries from potential participants are welcomed and should be addressed to the:

Course Co-ordinator, Fourth International Course, Centre for Research on the Epidemiology of Disasters, School of Public Health (EPID 30.34), Catholic University of Louvain, 30, Clos Chapelle-aux-Champs, 1200 Brussels, Belgium. Tel.: (32-2) 7643327 or 7643823; Fax.: (32-2) 7643328; Telex: B 23722 UCL WOL.; E-Mail: (bitnet): cred@epid.ucl.ac.be.

HAZARDS-93

Fifth International Conference on Natural and Man-Made Hazards

29 August - 3 September 1993 - Qingdao, China

Theme: *Disaster Mitigation: Scientific and Socio-Economic Aspects.*

Organized by

The International Society for the Prevention and Mitigation of Natural Hazards (NHS); The IAPSO Commission on Natural Marine Hazards; The Chinese Academy of Sciences, Beijing, China; The Institute of Oceanology, Academia Sinica, Qingdao, China.

Background

This international symposium is the fifth in the continuing interdisciplinary series begun in 1982. The objectives of this series of symposia are to promote the advancement of hazard sciences, to perceive and explore those aspects that may be similar among some of the various hazards, to review the newest developments in a few selected fields, and also to outline new directions for future research.

Scientific Programme

Under the umbrella of HAZARDS-93 several symposia and workshops will be held, with particular emphasis on mitigation aspects and preventive measures. Keynote speakers, special invited lecturers and contributed papers on current practices and research activities will be grouped into the following themes:

- Geological hazards (earthquakes, volcanoes,

landslides, snow avalanches, soil erosion)

- Meteorological hazards (cyclones, droughts, desertification, etc.)
- Hydrological and marine hazards (tsunamis, storm surges, floods, sea-level rise, ice, icebergs, and marine biological hazards)
- Technological and man-made hazards (air and water pollution, deforestation)
- Disaster prevention, mitigation and management
- Economic, social and political aspects
- Tools and techniques for disaster assessments
- Public education and preparedness
- Risk assessment problems
- The IDNDR: a perfect chance to put hazard research into practice.

Language

The language of the symposium will be English. For more information please write to: Dr. T.S. Murty, Chairman Scientific Committee, Institute of Ocean Sciences, P.O. Box 6000, Sydney, B.C. V8L 4B2, CANADA or Professor Qin Yunshan, Chairman, Local Organizing Committee, HAZARDS-93 International Symposium, Institute of Oceanology, Academia Sinica, 7 Nan-Kai Road, Qingdao - 266071, CHINA. ■